

ABSTRACT OF THE DISCLOSURE

A mold for the casting of metals including an aggregate comprising a refractory particulate material and a soluble binder which provides for minimal heat transfer between the mold and the molten metal during filling. The aggregate preferably includes at least a proportion of particulate material having a heat diffusivity at least as low as silica sand to reduce the chilling effect of the mold. The mold is removed from the casting the action of a solvent, which simultaneously cools and solidifies the casting at a maximum rate. Processes for forming the mold and the casting of metals using the mold are also disclosed.

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